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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,170

02/23/2005

Fuminori Satoji

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J C PATENTS, INC.  
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IRVINE, CA 92618

EXAMINER

KRAUSE, JUSTIN MITCHELL

ART UNIT

PAPER NUMBER

3656

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/526,170	<b>Applicant(s)</b> SATOJI ET AL.	
	<b>Examiner</b> JUSTIN KRAUSE	<b>Art Unit</b> 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/30/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Objections***

Claim 3 objected to because of the following informalities: claim 3 contains a double inclusion. Line 5 recites "a thrust member attached to one end of the housing". Line 14 repeats the limitation and should be further defined or removed from the claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, and 7/2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no antecedent basis for "the upper end" nor is there a reference frame to determine what is considered to be "the upper end" relative to any other direction.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al (US 2002/0025089) in view of Fujinaka (WO02/10602, US Patent 6,832,853 is referenced as an English translation).

Mori discloses a dynamic bearing device comprising

A housing (5)

a sleeve (7) made from sintered metal (paragraph 0022) fixed to the inner periphery of the housing

an axial member (3) having an axial portion (3a) and a flange portion (3b)

a thrust member (51) attached to one end of the housing

a radial bearing portion (11) provided between the sleeve and the axial portion of the axial member, supporting the axial member in a noncontact manner through dynamic pressure of lubricating oil

a thrust bearing portion between the bearing sleeve and the flange portion (Cs1) to support the axial member in a non-contact manner, and between a thrust member and the flange portion (Cs2)

the housing has a cylindrical side portion (5b) and a ring shaped seal portion (9) integrally extending from the upper end of said side portion (as assembled, the ring is deemed to be integral to the housing. Further it is well settled that to make two separate elements integral is obvious to one of ordinary skill in the art. See *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)) in an inner radial direction,

a seal space is defined between an inner peripheral surface of the seal portion and an outer periphery of said axial portion (see fig 2), and an internal space of the housing sealed with the seal portion is filled with the lubricating oil (within areas 11, Cs1, Cs2) and the oil level is maintained within the space.

Mori does not disclose the housing made of resin.

Fujinaka teaches a housing (2) formed of resin for the purpose of easy manufacturing and assembly.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mori to include a housing formed of resin, for the desired purpose of improving ease of manufacturing as taught by Fujinaka.

Regarding claim 2, Mori discloses the thrust member may be a separate piece (paragraph 0037) but does not disclose how the thrust member and housing side cylindrical portions are joined.

Fujinaka teaches welding a cap to the side cylindrical portions as a means to assemble a separate member (9) to side cylindrical portions of a housing (2) for the purpose of preventing leakage (col 4, line 66- col 5, line 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Fujinaka and weld the thrust member to the side cylindrical portions of the housing for the desired purpose of preventing lubricant leakage as taught by Fujinaka.

Regarding claim 3, Mori does not disclose a seal member on the end where the thrust member is located and fixed on the end by welding.

Fujinaka teaches a thrust member (7) attached to one end of the housing and a seal member (9) fixed on the end by welding to prevent leakage (col 4, line 66- col 5, line 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mori to include a thrust member on one end and a seal member on the end secured fixed on the end by welding for the desired purpose of preventing leakage as taught by Fujinaka.

Regarding claim 4, Mori does not disclose a the sleeve fixed on the inner periphery of the housing by welding.

Fujinaka teaches the known use of heat or ultrasonic welding to secure elements to each other, the welding providing an advantage that the likelihood of deformation is low (col 5, lines 1-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mori with the teachings of Fujinaka that the use of welding to secure the sleeve to the housing, since welding is not likely to cause deformation of the parts, maintaining precision.

Regarding claim 5, Mori teaches a seal (9) fixed on the housing (5) but does not disclose a means for fixing the seal.

Fujinaka teaches the known use of heat or ultrasonic welding to secure two elements together, welding providing an advantage that the likelihood of deformation is low (col 5, lines 1-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mori with the teachings of Fujinaka that the use of welding to secure the seal to the housing, since welding is not likely to cause deformation of the parts, maintaining precision.

Regarding claim 7, as has previously been shown above, Fujinaka teaches ultrasonic welding as a suitable type of welding.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori in view of Tanaka (US Patent 5,683,183).

Mori discloses a dynamic bearing device comprising

A housing (5)

a sleeve (7) made from sintered metal (paragraph 0022) fixed to the inner periphery of the housing

an axial member (3) having an axial portion (3a) and a flange portion (3b)

a thrust member (51) attached to one end of the housing

a radial bearing portion (11) provided between the sleeve and the axial portion of the axial member, supporting the axial member in a noncontact manner through dynamic pressure of lubricating oil

a thrust bearing portion between the bearing sleeve and the flange portion (Cs1) to support the axial member in a non-contact manner, and between a thrust member and the flange portion (Cs2)

Mori does not disclose that the housing and the sleeve are made of the same type of metal.

(The examiner applies applicants meaning for the phrase "of the same type of metal" as is stated on page 8, lines 9-16 of the specification)

Tanaka teaches a dynamic bearing having a housing and bearing sleeve made from steel (col 9, lines 1-2) which are secured to each other by welding (col 22, line 17) for the desired purpose of improving working accuracy and ease of machining (abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mori and form the housing and bearing sleeve from the same type of metal for the desired purpose of improving working accuracy and easy machining as taught by Tanaka.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN KRAUSE whose telephone number is (571)272-3012. The examiner can normally be reached on Monday - Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Justin Krause/  
Examiner, Art Unit 3656

/Richard WL Ridley/  
Supervisory Patent Examiner, Art Unit 3656